WHAT IS CLAIMED IS:

1. A method of preparing an asphalt emulsion composition comprises preparing an aqueous emulsion of an asphalt/polymer composition comprising a mixture of asphalt and between about 1% and about 10% substantially water-free synthetic polymer, by weight, and mixing said aqueous emulsion with rubber particles, at least a portion of which pass a #10 U.S. series sieve, in a synthetic polymer:rubber ratio of between about 1:2 and about 1:20, by weight, at ambient temperature to form said asphalt emulsion composition.

2. A method of Claim 1 including mixing a rheological agent with said polymer/asphalt and rubber particles to prepare said asphalt emulsion composition.

3. A method of preparing an asphalt emulsion paving composition comprising mixing aggregate with the asphalt emulsion composition prepared according to Claim 1.

4. A method of preparing an asphalt emulsion paving composition comprising mixing aggregate with the asphalt emulsion composition prepared according to Claim 2.

5. A method of Claim 1, wherein said asphalt/polymer composition is prepared by melting said polymer in said asphalt.

6. A method of Claim 1 wherein said asphalt/polymer composition is prepared by polymerizing at least a portion of said polymer in said asphalt.

7. A method of Claim 4 wherein said aggregate is mixed with said asphalt emulsion composition at ambient temperature.

8. A method of Claim 6 wherein said polymer/asphalt composition is prepared by melting said polymer in said asphalt.

9. A method of Claim 1, wherein the ratio of synthetic polymer:rubber is between about 1: and about 1:10, by weight.

10. A composition prepared according to Claim 1.

11. A paving composition prepared according to Claim 7 wherein the ratio of polymer:rubber particles is between about 1:3 and about 1:10, by weight.

12. A paving composition of Claim 11 wherein at least a portion of said particles pass a #20 U.S. series mesh.

13. A composition of Claim 10 wherein said polymer is a styrene-butadiene copolymer.

14. A method of Claim 1 comprising mixing said aqueous emulsion with a solids mix composition comprising said rubber particles and one or more additives selected from rheological agent, gilsonite, surface active clay, carbon black, graphite, water and polymer fibers at ambient temperature to form said asphalt emulsion composition.